

TRANSFER BREAKS

Event Prevention | Root Cause



Initial Use Case

Since 2013, a plant experienced difficulties with a machine that would frequently break when pushing additional throughput. The number of transfer breaks varied each day and were seemingly random in nature. A transfer break is categorized as the failure of the undried sheet to “transfer” from the felt and onto the backing roll. This resulted in the sheet breaking and downtime being incurred to rethread it onto the machine. If this machine ran reliably, it would mitigate a loss of \$1M per month.

Solution

EFT initially utilized over 4,500 variables provided for analysis. Through evaluation, these variable lists were reduced to 600. A predictive model was built with our client’s process knowledge experts in order to determine the probability of these transfer breaks. With the amount of reduced variable counts and use of correlations, EFT and the client were able to find a weekly anomaly causing a significant amount of these breaks. Through this effort, the client’s process knowledge experts were able to identify a relationship using four variables, ultimately saving them \$12MM annually in wasted production. The transfer break severity and frequency were drastically reduced, which in turn increased process stability and predictability.

